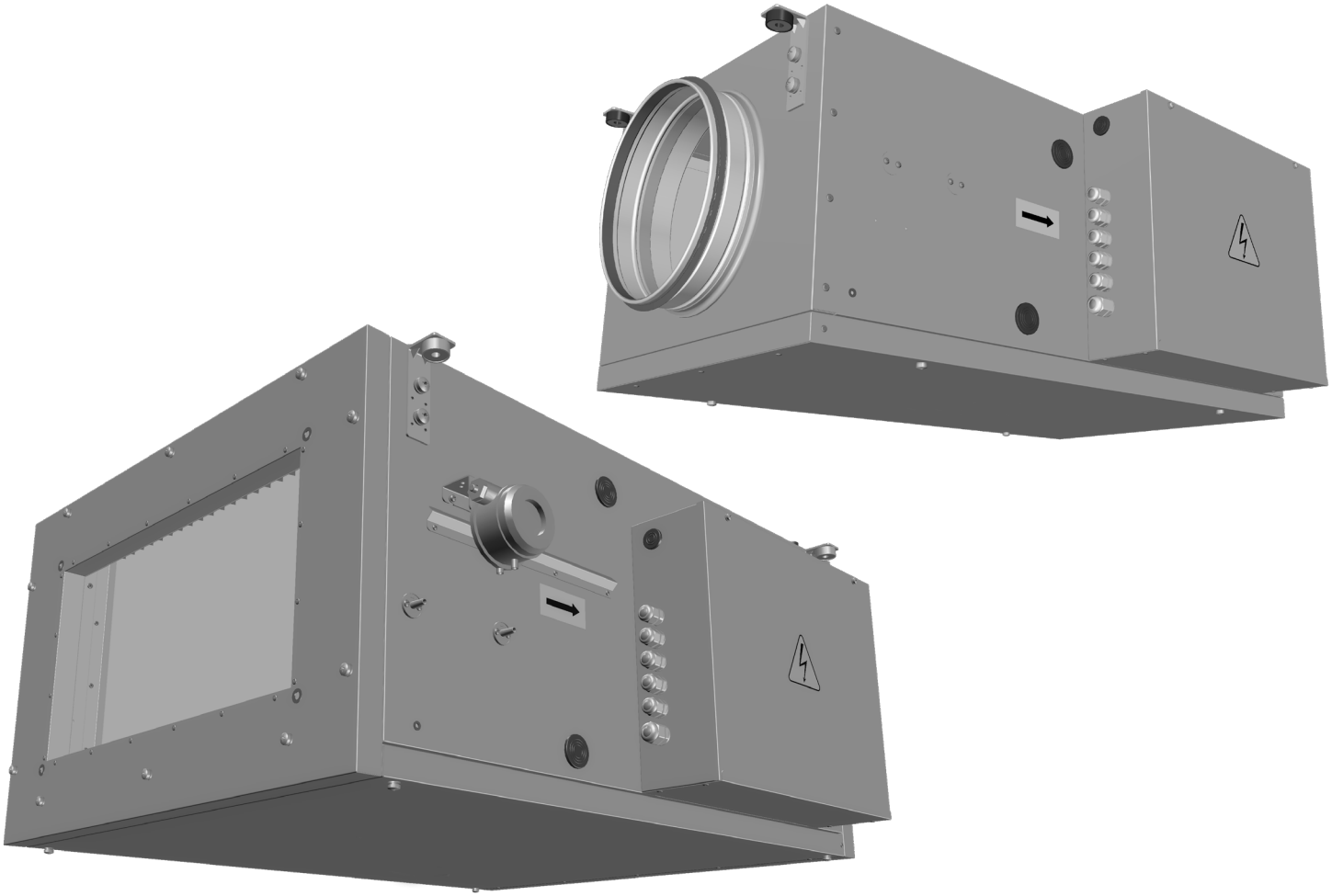

*SINGLE-BLOCK AIR SUPPLY UNIT*

**BLAUBOX EC MW 700 S30/31/32**
**BLAUBOX EC MW 1000 S30/31/32**
**BLAUBOX EC MW 1500 S30/31/32**
**BLAUBOX EC MW 2000 S30/31/32**
**BLAUBOX EC MW 3000 S30/31/32**
**BLAUBOX EC MW 4000 S30/31/32**

**EN** *USER'S MANUAL*

BLAUBERG

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This user's manual is a main operating document intended for technical, maintenance, and operating staff.
The manual contains information about purpose, technical details, operating principle, design, and installation of the BLAUBOX EC MW 700/1000/1500/2000/3000/4000 S30/31/32 unit and all its modifications.
Technical and maintenance staff must have theoretical and practical training in the field of ventilation systems and should be able to work in accordance with workplace safety rules as well as construction norms and standards applicable in the territory of the country.

## SAFETY REQUIREMENTS

This unit is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the unit by a person responsible for their safety.
Children should be supervised to ensure that they do not play with the unit.
This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
Cleaning and user maintenance shall not be done by children without supervision.
Children shall not play with the appliance.

Connection to the mains must be made through a disconnecting device, which is integrated into the fixed wiring system in accordance with the wiring rules for design of electrical units, and has a contact separation in all poles that allows for full disconnection under overvoltage category III conditions.

If the supply cord is damaged, it must be replaced by the manufacturer, its service agent, or similarly qualified persons in order to avoid a safety hazard.

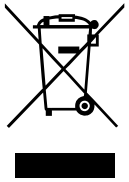
CAUTION: In order to avoid a safety hazard due to inadvertent resetting of the thermal cut-out, this unit must not be supplied through an external switching device, such as a timer, or connected to a circuit that is regularly switched on and off by the utility.

Ensure that the unit is switched off from the supply mains before removing the guard.
If there are any unusual oscillating movements, immediately stop using the unit and contact the manufacturer, its service agent or suitably qualified persons.
The replacement of parts of the safety suspension system device shall be performed by the manufacturer, its service agent or suitably qualified persons.

Precautions must be taken to avoid the back-flow of gases into the room from the open flue of gas or other fuel-burning appliances.

The appliance may adversely affect the safe operation of appliances burning gas or other fuels (including those in other rooms) due to back flow of combustion gases. These gases can potentially result in carbon monoxide poisoning. After installation of the unit the operation of flued gas appliances should be tested by a competent person to ensure that back flow of combustion gases does not occur.

All operations described in this manual must be performed by qualified personnel only, properly trained and qualified to install, make electrical connections and maintain ventilation units.
Do not attempt to install the product, connect it to the mains, or perform maintenance yourself. This is unsafe and impossible without special knowledge.
Disconnect the power supply prior to any operations with the unit.
All user's manual requirements as well as the provisions of all the applicable local and national construction, electrical, and technical norms and standards must be observed when installing and operating the unit.
Disconnect the unit from the power supply prior to any connection, servicing, maintenance, and repair operations.
Connection of the unit to power mains is allowed by a qualified electrician with a work permit for the electric units up to 1000 V after careful reading of the present user's manual.
Check the unit for any visible damage of the impeller, the casing, and the grille before starting installation. The casing internals must be free of any foreign objects that can damage the impeller blades.
While mounting the unit, avoid compression of the casing! Deformation of the casing may result in motor jam and excessive noise.
Misuse of the unit and any unauthorised modifications are not allowed.
Transported air must not contain any dust or other solid impurities, sticky substances, or fibrous materials.
Do not use the unit in a hazardous or explosive environment containing spirits, gasoline, insecticides, etc.
Do not close or block the intake or extract vents in order to ensure the efficient air flow.
Do not sit on the unit and do not put objects on it.
The information in this user's manual was correct at the time of the document's preparation.
The Company reserves the right to modify the technical characteristics, design, or configuration of its products at any time in order to incorporate the latest technological developments.
Never touch the unit with wet or damp hands.
Never touch the unit when barefoot.
Do not install or use the product until all construction and finishing work has been completed in the room where it is to be installed.
BEFORE INSTALLING ADDITIONAL EXTERNAL DEVICES, READ THE RELEVANT USER MANUALS.



**THE PRODUCT MUST BE DISPOSED SEPARATELY AT THE END OF ITS SERVICE LIFE.**
**DO NOT DISPOSE THE UNIT AS UNSORTED DOMESTIC WASTE.**

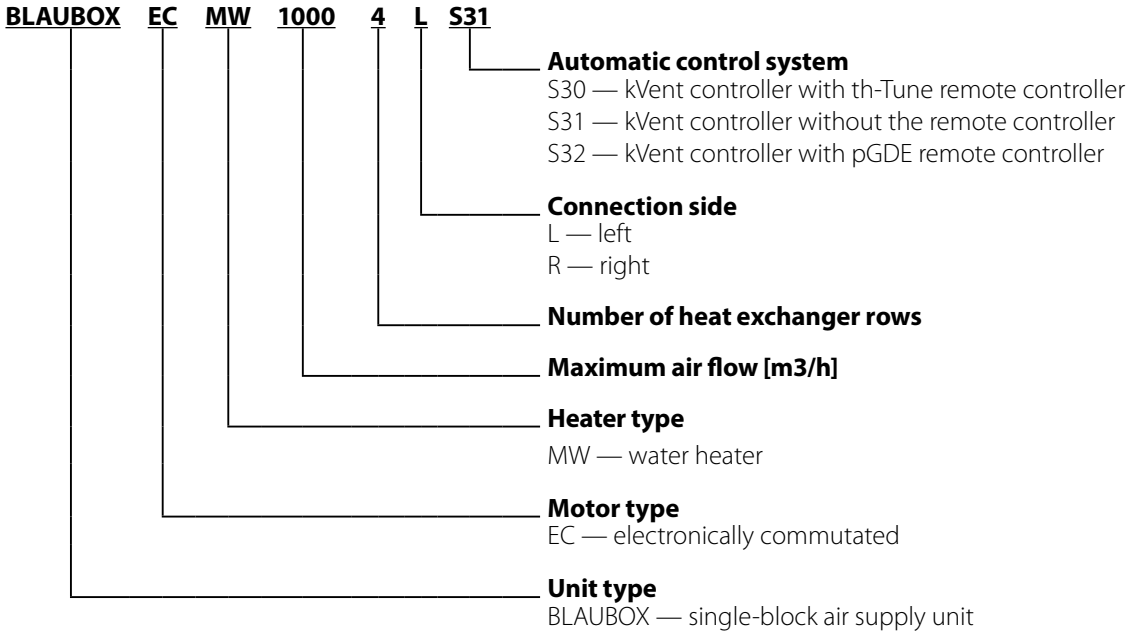
## PURPOSE

The product is designed for filtering, supplying and heating the supply purified air in private residences, offices, hotels, cafes, conference rooms and other domestic and public spaces.
The unit is a component part and is not designed for stand-alone operation.
Transported air must not contain any flammable or explosive mixtures, evaporation of chemicals, sticky substances, fibrous materials, coarse dust, soot and oil particles or environments favourable for the formation of hazardous substances (toxic substances, dust, pathogenic germs).
The unit must not be used for purposes other than those specified in this manual or outside the ambient conditions specified herein.
The unit is rated for continuous operation.

## DELIVERY SET

| **Name** | BLAUBOX MW EC 700/1000/1500/2000/3000/4000 S31 | BLAUBOX MW EC 700/1000/1500/2000/3000/4000 S30/32 |
|---|---|---|
| BLAUBOX unit | 1 pc. | 1 pc. |
| Remote controller | – | 1 pc. |
| Outdoor temperature sensor | 1 pc. | 1 pc. |
| User's manual | 1 pc. | 1 pc. |
| Packing box | 1 pc. | 1 pc. |

## DESIGNATION KEY



## TECHNICAL DATA

The unit is designed for indoor application with the ambient temperature ranging from +1 °C up to +40 °C and relative humidity up to 80 % without condensation. The transported air temperature should be from -30 °C to +40 °C with a relative humidity no more than 90%.

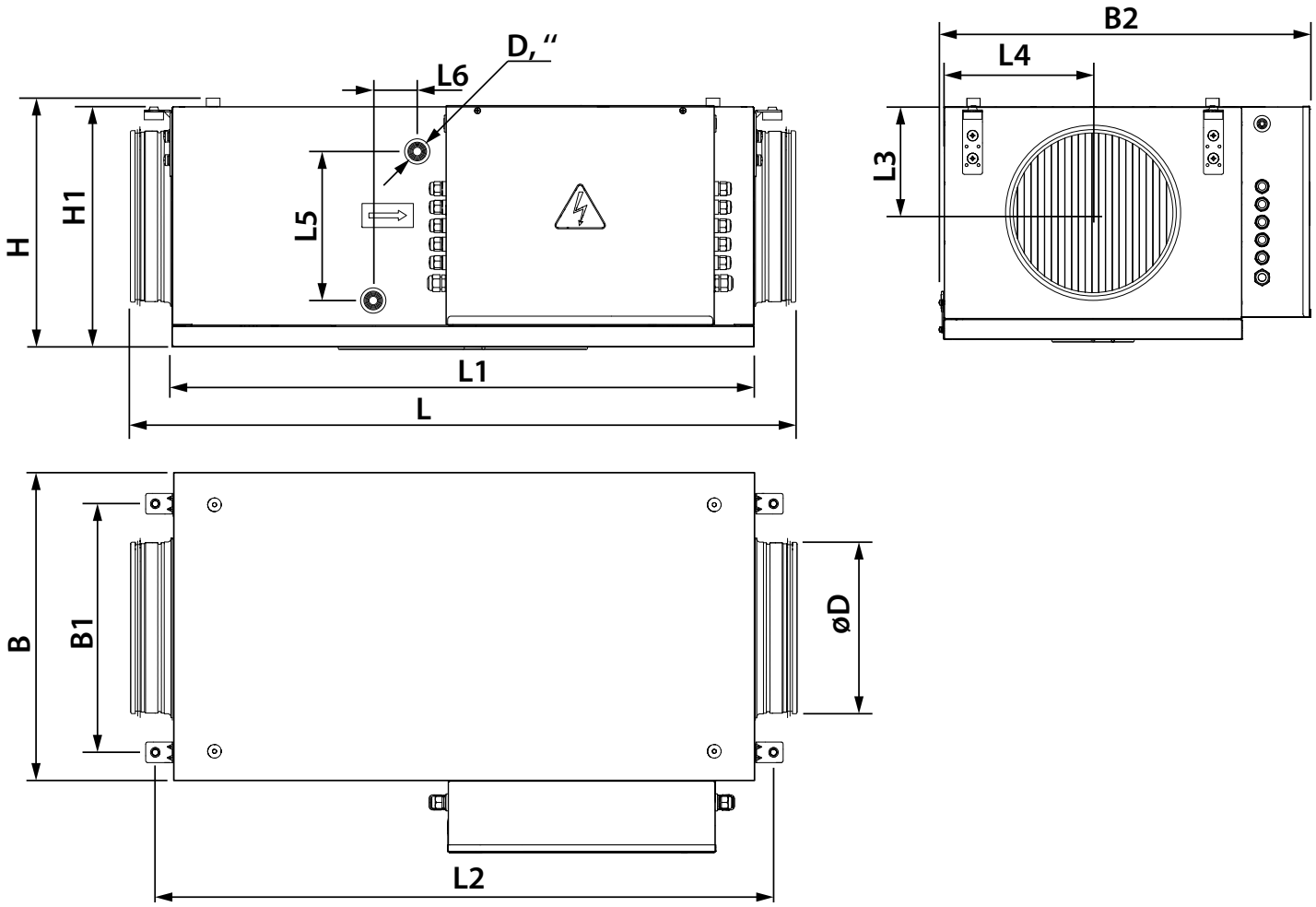
The unit is rated as a class I electric appliance.

Hazardous parts access and water ingress protection rating:

- IP22 for the unit connected to the air ducts
- IP44 for the unit motors

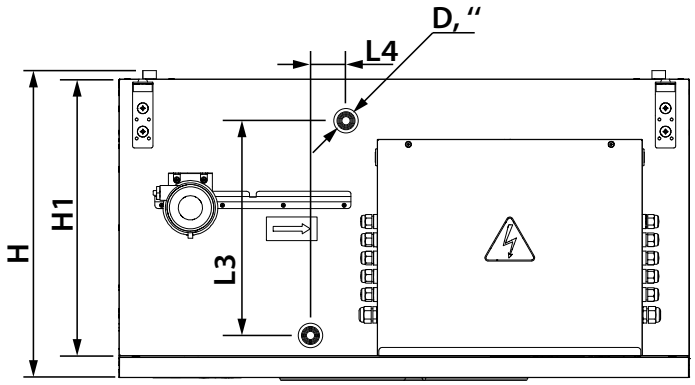
The unit design is constantly being improved, thus some models may be slightly different from those described in this manual.

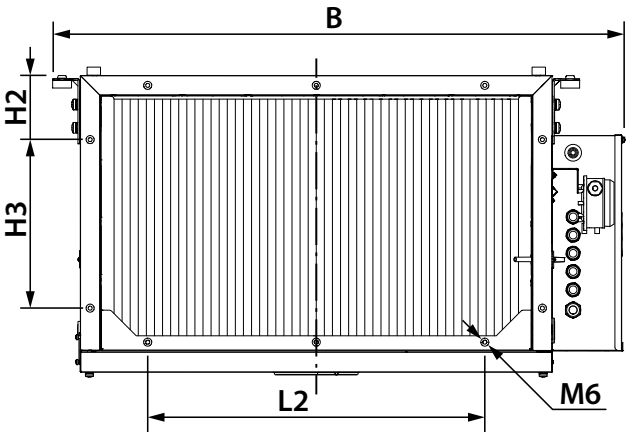
**Overall and connection dimensions of BLAUBOX EC MW 700 S30/31/32**

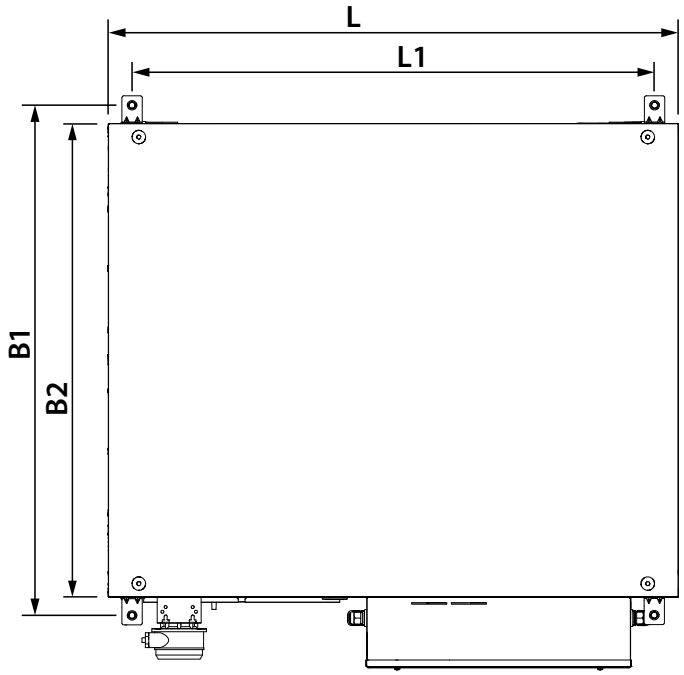



| Model | L | L1 | L2 | L3 | L4 | L5 | L6 | D," | H | H1 | B | B1 | B2 | øD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **BLAUBOX EC MW 700 S30/31/32** | 972 | 850 | 903 | 160 | 225 | 218 | 65 | 3/4" | 370 | 351 | 460 | 353 | 565 | 250 |

**Overall and connection dimensions of the models**
**BLAUBOX EC MW 1000 S30/31/32, BLAUBOX EC MW 1500 S30/31/32, BLAUBOX EC MW 2000 S30/31/32, BLAUBOX EC MW 3000 S30/31/32, BLAUBOX EC MW 4000 S30/31/32 (without side panels)**

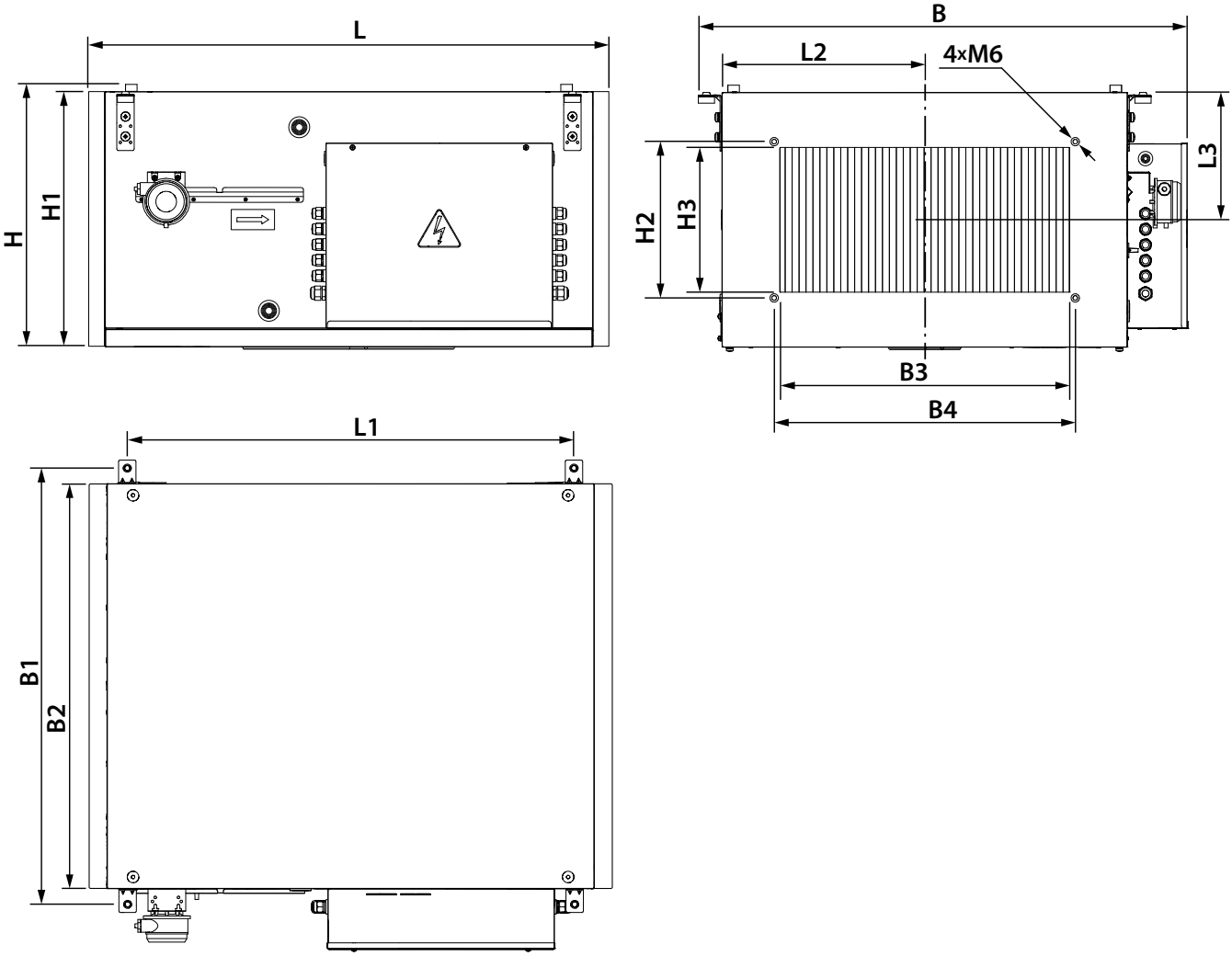



| Model | L | L1 | L2 | L3 | L4 | D | H | H1 | H2 | H3 | B | B1 | B2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **BLAUBOX EC MW 1000 S30/31/32** | 840 | 770 | 500 | 250 | 65 | 1 " | 393 | 348 | 95 | 160 | 746 | 653 | 600 |
| **BLAUBOX EC MW 1500 S30/31/32** | 840 | 770 | 500 | 318 | 65 | 1 " | 453 | 408 | 95 | 250 | 847 | 754 | 700 |
| **BLAUBOX EC MW 2000 S30/31/32** | 840 | 770 | 500 | 318 | 65 | 1 " | 453 | 408 | 95 | 250 | 847 | 754 | 700 |
| **BLAUBOX EC MW 3000 S30/31/32** | 1140 | 1070 | 600 | 368 | 65 | 1 1/4 " | 513 | 468 | 95 | 310 | 944 | 853 | 800 |
| **BLAUBOX EC MW 4000 S30/31/32** | 1140 | 1070 | 600 | 380 | 65 | 1 1/2 " | 563 | 518 | 95 | 360 | 1087 | 993 | 940 |

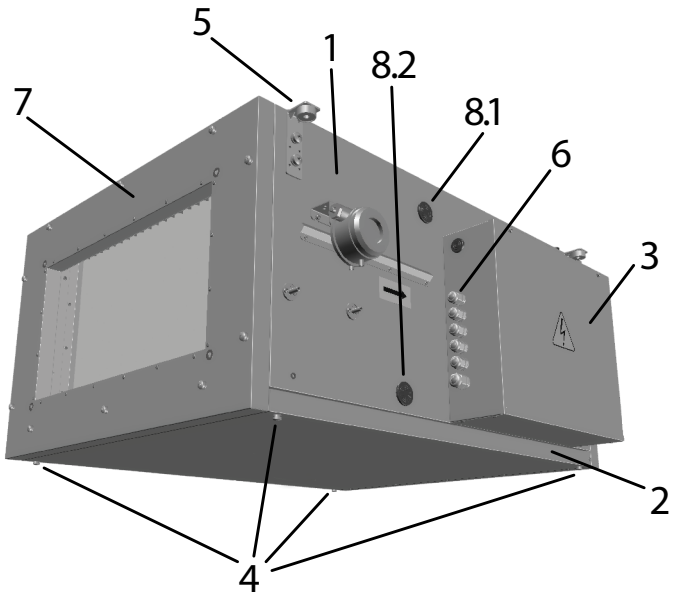
**Overall and connection dimensions of the models**
**BLAUBOX EC MW 1000 S30/31/32, BLAUBOX EC MW 1500 S30/31/32, BLAUBOX EC MW 2000 S30/31/32, BLAUBOX EC MW 3000 S30/31/32, BLAUBOX EC MW 4000 S30/31/32 (with side panels)**

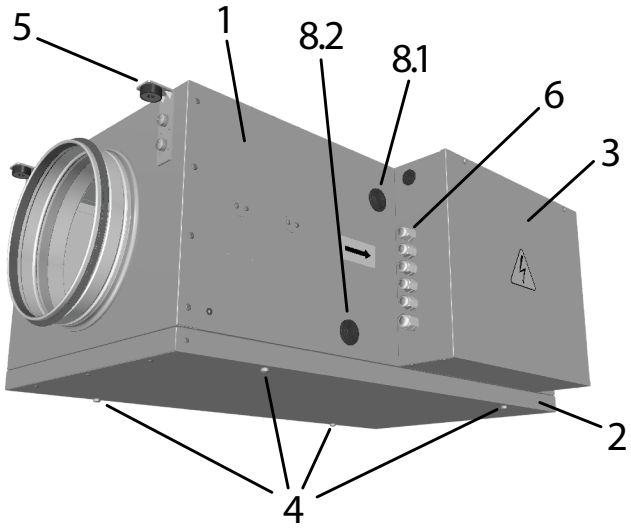



| Model | L | L1 | L2 | L3 | H | H1 | H2 | H3 | B | B1 | B2 | B3 | B4 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **BLAUBOX EC MW 1000 S30/31/32** | 900 | 770 | 300 | 190 | 393 | 380 | 220 | 200 | 746 | 653 | 600 | 400 | 420 |
| **BLAUBOX EC MW 1500 S30/31/32** | 900 | 770 | 350 | 220 | 453 | 440 | 270 | 250 | 847 | 754 | 700 | 500 | 520 |
| **BLAUBOX EC MW 2000 S30/31/32** | 900 | 770 | 350 | 220 | 453 | 440 | 320 | 300 | 847 | 754 | 700 | 500 | 520 |
| **BLAUBOX EC MW 3000 S30/31/32** | 1200 | 1070 | 400 | 250 | 513 | 500 | 320 | 300 | 944 | 853 | 800 | 600 | 620 |
| **BLAUBOX EC MW 4000 S30/31/32** | 1200 | 1070 | 470 | 275 | 563 | 550 | 420 | 400 | 1087 | 993 | 940 | 700 | 720 |

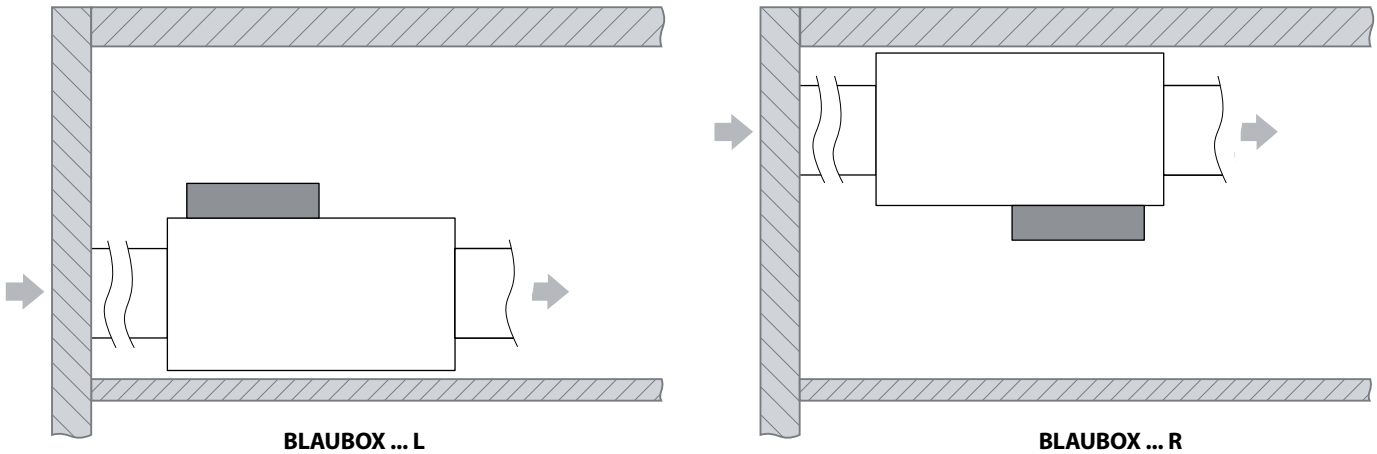
## DESIGN AND OPERATING PRINCIPLE

The unit is housed in a sound-insulated galvanized steel casing (item 1). The unit casing has 4 mounting brackets with anti-vibration connectors for ceiling or wall mounting (item 5).
The air flow direction is indicated by the arrow on the fan casing.
The bottom side of the casing is covered by a removable cover (item 2), which is secured with 4 bolts (item 4).
A control unit (item 3) is installed on the casing. The power and control cables are pulled through cable glands (item 6). The unit is equipped with a water heater.
On side surfaces of the units there are openings for connecting heat medium supply (item 8.1) and return (item 8.2) pipes.
To facilitate unit's connection to the heat medium supply and return pipelines, the water heat exchanger can be moved to connect either on the right or left side of the casing, regardless of the location of the control unit.
Models BLAUBOX EC MW 1000 S30/31/32, BLAUBOX EC MW 1500 S30/31/32, BLAUBOX EC MW 2000 S30/31/32, BLAUBOX EC MW 3000 S30/31/32, BLAUBOX EC MW 4000 S30/31/32 are equipped with end panels (item 7) for connecting the unit to the air duct via flexible inserts.
To install the unit directly into a rectangular air duct, the end panels must be removed.
For ease of electrical connection, the units can be ordered with the control unit located either on right or left side of the casing (right- and left-side versions, respectively, as indicated in the "Designation key" section).



**TOP VIEW**



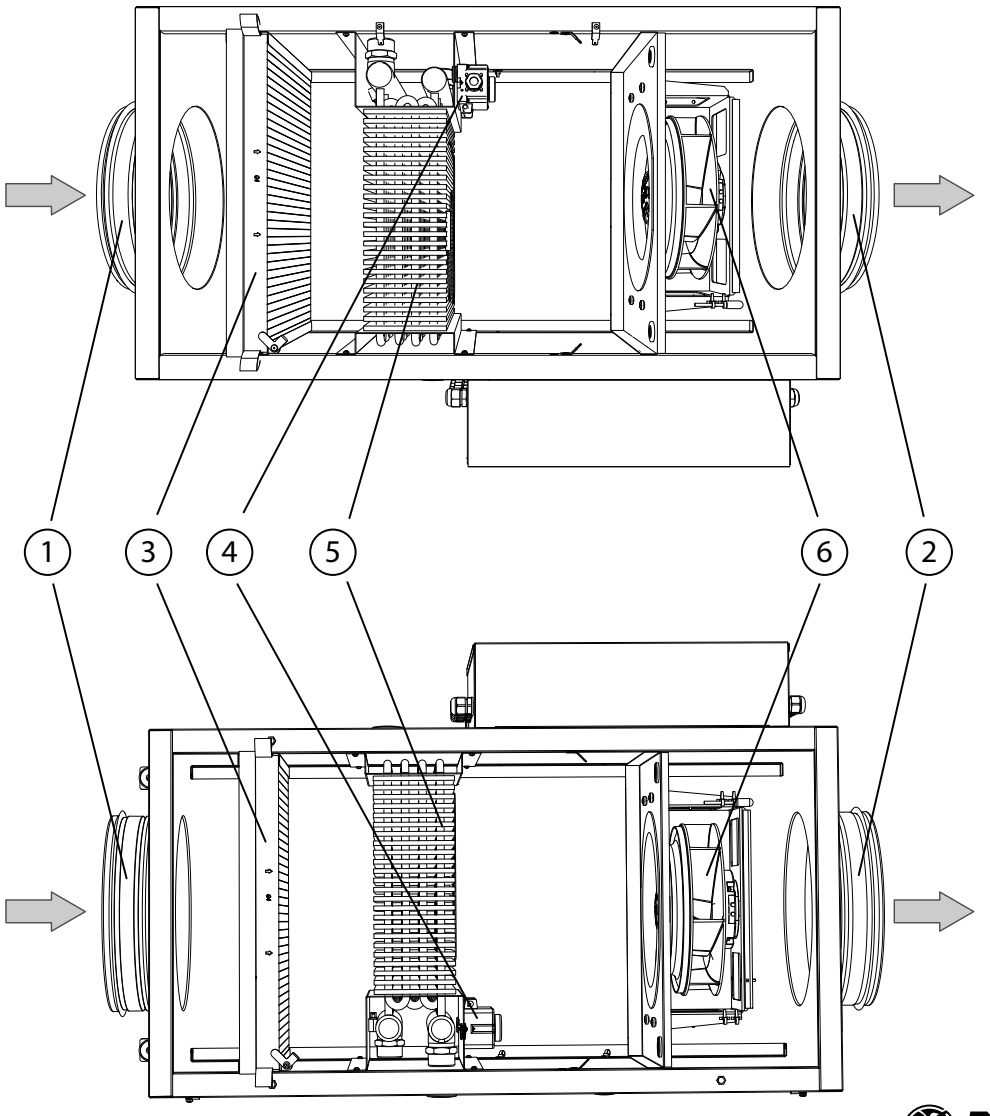
**BLAUBOX ... L** **BLAUBOX ... R**

If necessary, the control unit can be moved to the other side of the unit casing before being installed in the ventilation system.
The figure below shows the internals of the left and right version of the units with the removable cover removed. The air flow direction is indicated by the arrows.

- The inlet and outlet spigots for duct connections (item 1 and 2 respectively);
- air filter with G4 filtration class (item 3);
- thermostat (item 4);
- water heater (item 5);
- fan unit (item 6).

**BOTTOM VIEW**
**BLAUBOX EC MW 700 S30/31/32**

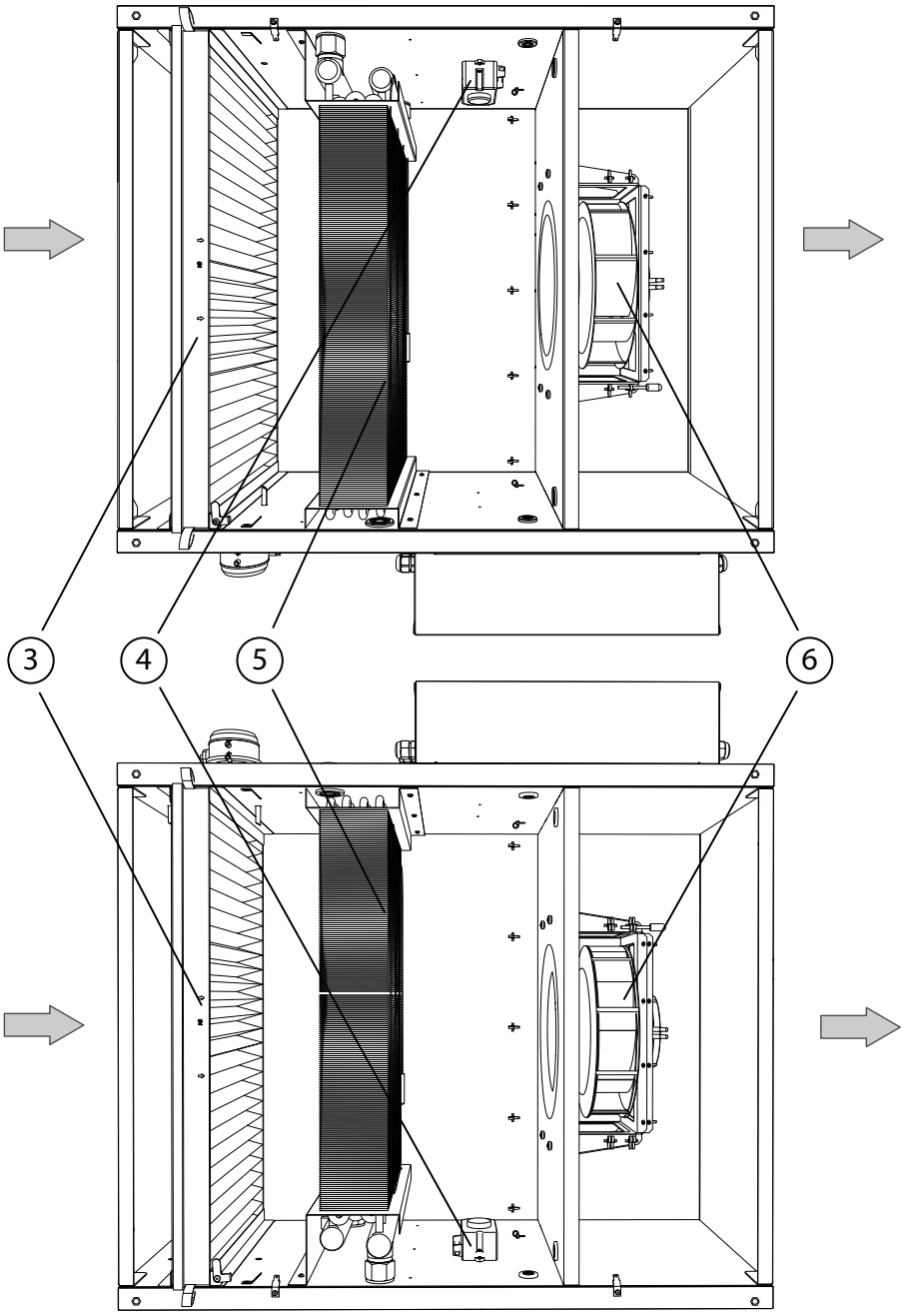
**BLAUBOX ... L**




**BLAUBOX ... R**

**BOTTOM VIEW**
**BLAUBOX EC MW 1000 S30/31/32, BLAUBOX EC MW 1500 S30/31/32, BLAUBOX EC MW 2000 S30/31/32, BLAUBOX EC MW 3000 S30/31/32, BLAUBOX EC MW 4000 S30/31/32**

**BLAUBOX ... L**




**BLAUBOX ... R**

The unit supplies heated and filtered outdoor air into the room.

The unit uses a frameless radial fan directly driven by an external rotor motor. The fan impeller blades are curved backwards. The motor has built-in thermal protection and requires no maintenance.

The air after filtration passes through a water heater.

To maintain the set air temperature in the supply air duct, the unit's automatic control system regulates the heat medium flow rate through the water heater.

The unit has double protection against heat medium freezing.
When air temperature drops downstream the heater below the set point, the thermostat is activated, the fan is switched off and the maximum heat medium flow rate is set and the automatic control system displays an error message (code A002). When air temperature rises again above the set threshold, the thermostat returns to its original position and the unit resumes its previous operation. Automatic turn on of the unit is possible three times in a row within one hour. After this thermostat is triggered for the fourth time, the fan does not start. In this situation, operator's involvement is required to restart the unit.

When the temperature of the heat transfer medium at the heat exchanger outlet drops below a set threshold (the threshold value is set from the remote controller or via the web interface of the automatic control system), the fan stops and the maximum heat medium flow rate is set and the automatic control system displays an error message (code A033). When the temperature at the heat exchanger outlet rises above the set threshold again, the unit will resume its previous operation. Automatic turn on of the unit is possible three times in a row within one hour. After the fourth triggering of this thermostat, the fan does not start.

In this situation, operator's involvement is required to restart the unit.

## MOUNTING AND SET-UP

**WHILE INSTALLING THE UNIT ENSURE CONVENIENT ACCESS FOR SUBSEQUENT MAINTENANCE AND REPAIR**

The units are installed between the ducts, taking into account the direction of air flow, which is indicated by an arrow on the casing.
BLAUBOX EC MW 700 S30/31/32 units are equipped with branch pipes for connection to circular air ducts.
Units BLAUBOX EC MW 1000 S30/31/32, BLAUBOX EC MW 1500 S30/31/32, BLAUBOX EC MW 2000 S30/31/32, BLAUBOX EC MW 3000 S30/31/32, BLAUBOX EC MW 4000 S30/31/32 are installed in a rectangular air duct system through flexible inserts.
For direct installation of units BLAUBOX EC MW 1000 S30/31/32, BLAUBOX EC MW 1500 S30/31/32, BLAUBOX EC MW 2000 S30/31/32, BLAUBOX EC MW 3000 S30/31/32, BLAUBOX EC MW 4000 S30/31/32 in a rectangular air duct system, the end panels must be removed.

**WARNING!**

- To reduce aerodynamic losses related to air flow turbulence, use shaped reducers in order to reduce or increase the cross-section of air ducts.
- To minimise turbulence-induced air pressure losses, connect the straight air duct sections on both sides of the unit. Minimum straight air duct length: equal to 1 air duct diameter on intake side and 3 air duct diameters on outlet side.
- It is necessary to protect the internal parts of the unit from penetration of foreign objects. For example, install a grill with a cell side size of no more than 12.5 mm to prevent free access to the fan and foreign objects from entering the unit.
- It is recommended to connect the duct through a flexible connection to reduce noise and vibration transmission. Such connections allow compensating for possible mounting inaccuracies when connecting the unit to air ducts.
- The equipment and air ducts that are to be connected must have their own mounting bracket in order to avoid transferring their own weight loads to the unit.

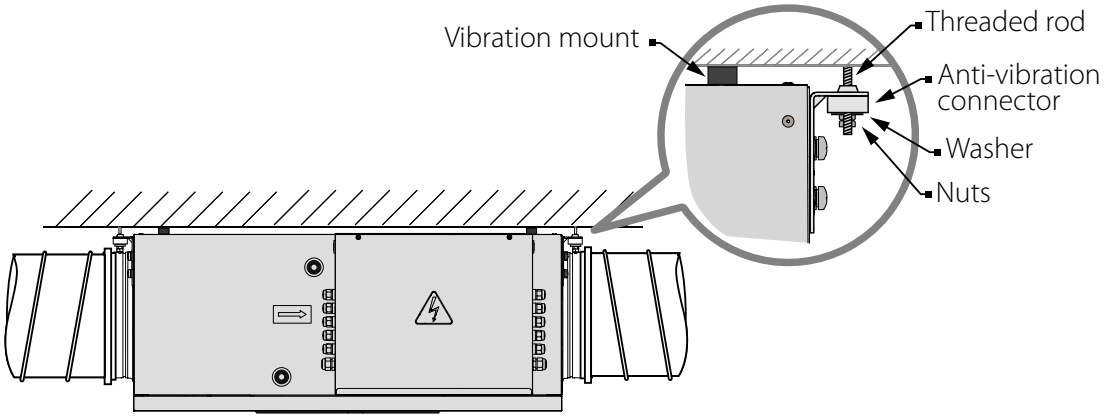
The unit must be mounted so that it can be accessed for service purposes. Enough space must be provided for the cover to open all the way. After removing the screws, the cover will hang on special cables.

Installation is possible on the ceiling or on the wall in such a way that the air flow is horizontal. In this case, the control unit can be located both above and below.

The mounting is carried out at 4 points with mounting brackets. It is recommended to use anchor threaded rods with nuts for fastening the unit. The vibration mounts on the unit casing must fit snugly against the ceiling or wall surface.

Fasteners for the unit mounting are not included into delivery set and should be ordered separately. While choosing fasteners consider the material of the mounting surface and the unit weight. For selection of the fasteners for unit mounting please refer to a service technician.

Install the outdoor temperature sensor outdoors or in the air duct in front of the unit on the outdoor side.




The units are available in the right- or left-side versions depending on the location of the control unit relative to the air flow direction. The units are assembled in such a way that the water heater connections are placed on the opposite side of the control unit.

The unit design allows moving the control unit and water heater to the opposite side of the casing. This allows for more efficient placement of equipment and communications during the installation of the ventilation system.

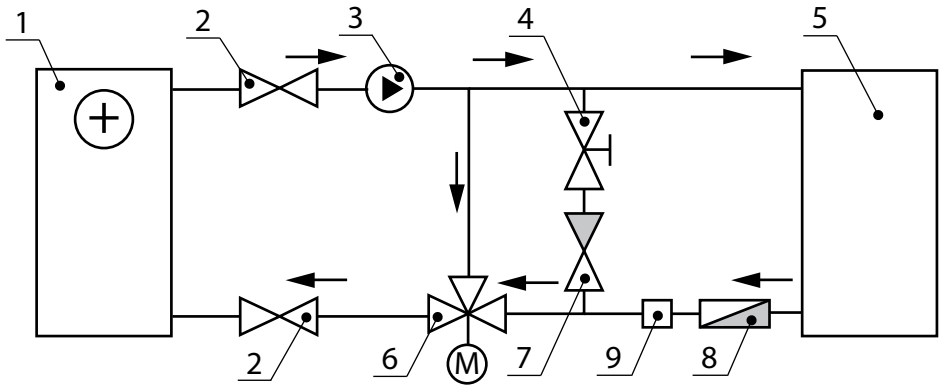
**Connecting the water heater**

Supply and return pipes must be connected in such a manner so that the direction of the heat medium flow would be opposite to the air flow (counter-flow connection). This allows reaching the maximum power output of the water heater. All technical characteristics of the units are given for counter-flow connection. With a direct-flow connection, the water heater has a reduced power output and becomes more resistant to freezing.

Connection points for the heat medium inlet and outlet are marked with stickers on both sides of the casing.

Heat exchanger's connection to the heat medium supply system must allow for easy disassembly when the heat exchanger is removed for maintenance.

The following is a typical diagram of the heat medium supply system (not included in the delivery set) for connecting the water heater.



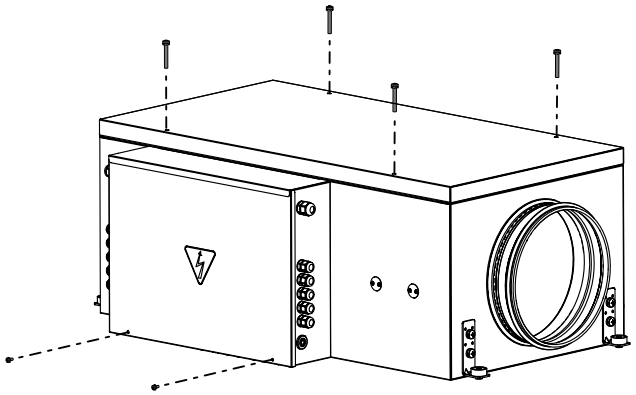

1. Unit's water heater
2. Shut-off ball valves
3. Circulation pump
4. Bypass control valve
5. Boiler
6. Water heater control valve with actuator
7. Check valve
8. Coarse filter
9. Water pressure sensor (nc)

**Moving the control unit to the opposite side of the casing**

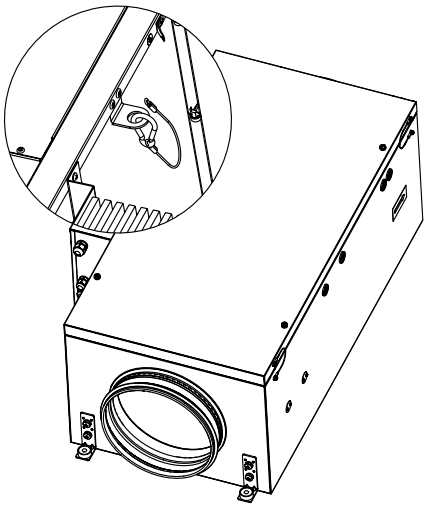
If you want to move the control unit before connecting the unit to the power supply and external devices, perform the below steps in the following order:

1. Position the unit on the surface by placing it on the vibration mounts with the removable cover upward. Remove the control unit cover as shown in the figure below.

2. Remove the removable cover from the unit's housing. To do this, unscrew the 4 screws that secure the cover.



3. Unclip the carabiner from the bracket with the hole. Open the removable cover using the safety cables.

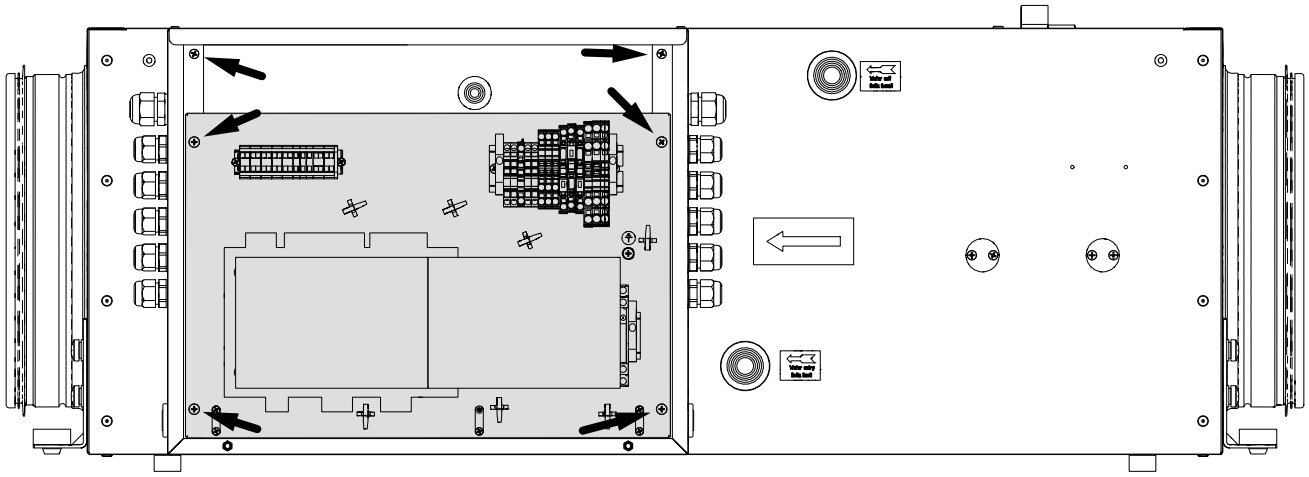


4. Label the wires connected to all devices in the control unit. Remember, photograph or write down the connection points of all cables.

5. Disconnect all cables and pull them out through cable glands inside the unit casing. Route all cables to the other side of the unit casing and run them through the cable glands on the opposite side. Secure the cables in the new position with cable ties.

6. Move the triac assembly on the cooling radiator (item 4 in the figure in the "Design and operating principles" section) together with the mounting bracket to the opposite side of the unit casing.

7. Remove the screws that secure the chassis with the automation elements in the control unit (highlighted in gray in the figure below). Then remove the screws that secure the control unit cover. The screws are indicated with arrows in the figure below. Install the control unit and chassis on the other side of the casing in reverse order using the same screws.

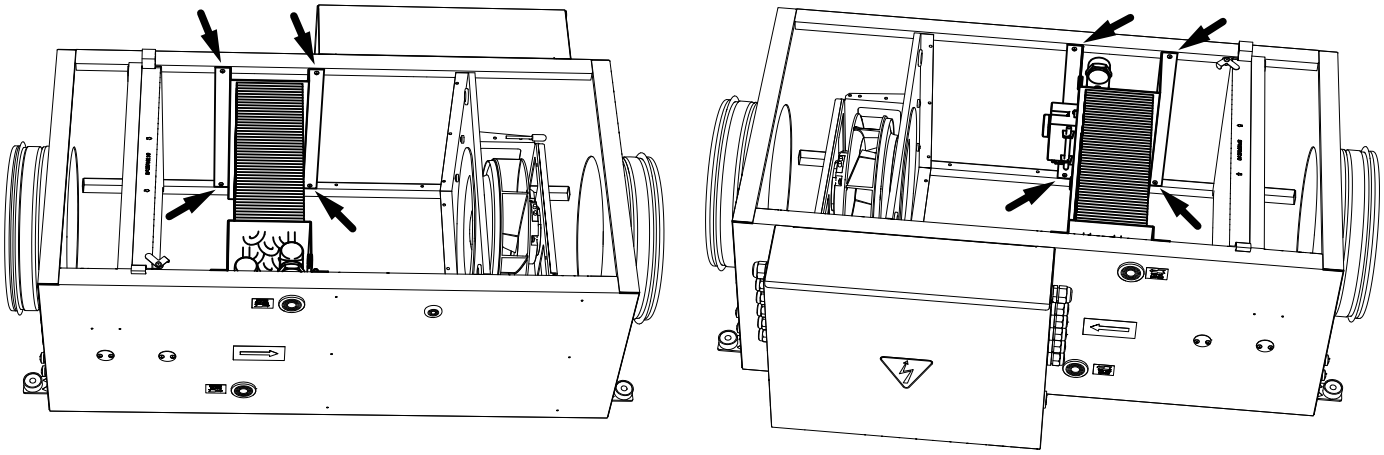


8. Connect all cables inside the unit in the new location at the same points as before disassembly. Reinstall the control unit cover.

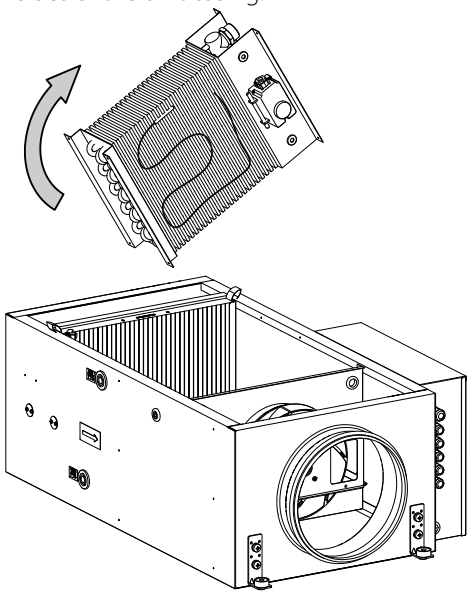
9. Reinstall the removable cover of the unit casing. The cover can be rotated and secured so that it hangs on the safety cables on the convenient side during maintenance work on the unit. Threaded holes are provided on both sides for attaching the cables to the casing.

**Moving the water heater for connecting on the opposite side of the casing**

To move the water heater prior to connecting the unit to the heat medium supply system, perform the following steps:
1. First, perform the steps described in points 1 and 2 of the section "Moving the control unit to the opposite side of the casing".
2. Disconnect the cable connector from the thermostat and the return heat medium temperature sensor.
3. Remove 8 screws that secure the water heater to the unit housing. The screws are indicated with arrows in the figure below.



4. Remove the water heater, turn it over as shown in the figure below and secure it in the new position using the same screws.
In models BLAUBOX EC MW 1000 S30/31/32, BLAUBOX EC MW 1500 S30/31/32, BLAUBOX EC MW 2000 S30/31/32, BLAUBOX EC MW 3000 S30/31/32, BLAUBOX EC MW 4000 S30/31/32 the thermostat is moved in the same way. Mounting points for installing the thermostat are provided on both sides of the unit casing.

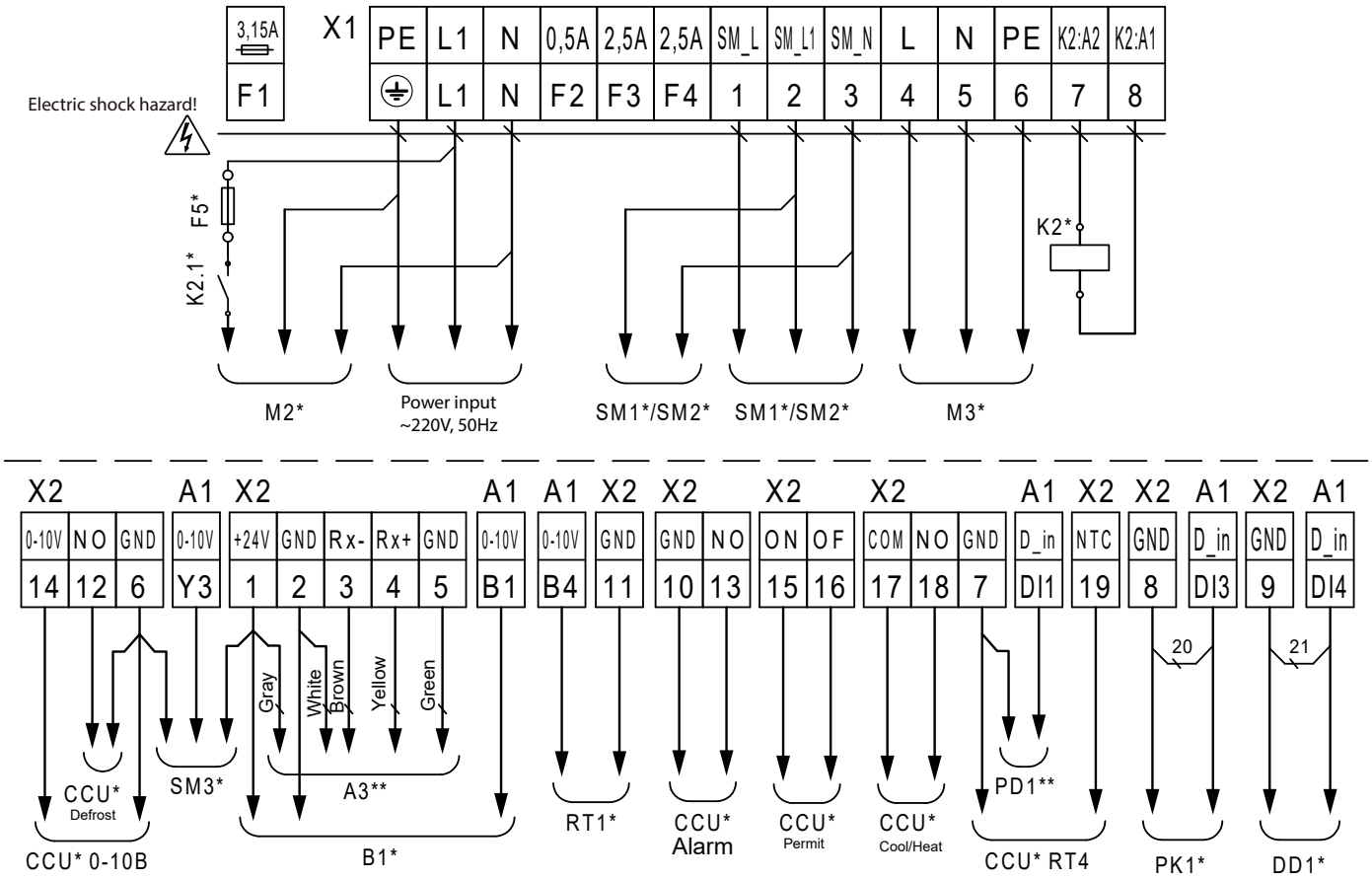


5. Remove the rubber plugs from the holes in the unit casing opposite the heater connections. Using a narrow utility knife cut a hole in the soundproofing material layer corresponding to the size of the opening in the outer casing of the unit.
6. Reroute the cables of the thermostat and return heat medium temperature sensor to the new connection location. Secure the cables in the new position with cable ties. Connect the cable connector of the thermostat and the return heat medium temperature sensor.
7. Reinstall the cover of the unit casing. The cover can be rotated and secured so that it hangs on the safety cables on the convenient side during maintenance work on the unit. Threaded holes are provided on both sides for attaching the cables to the casing.

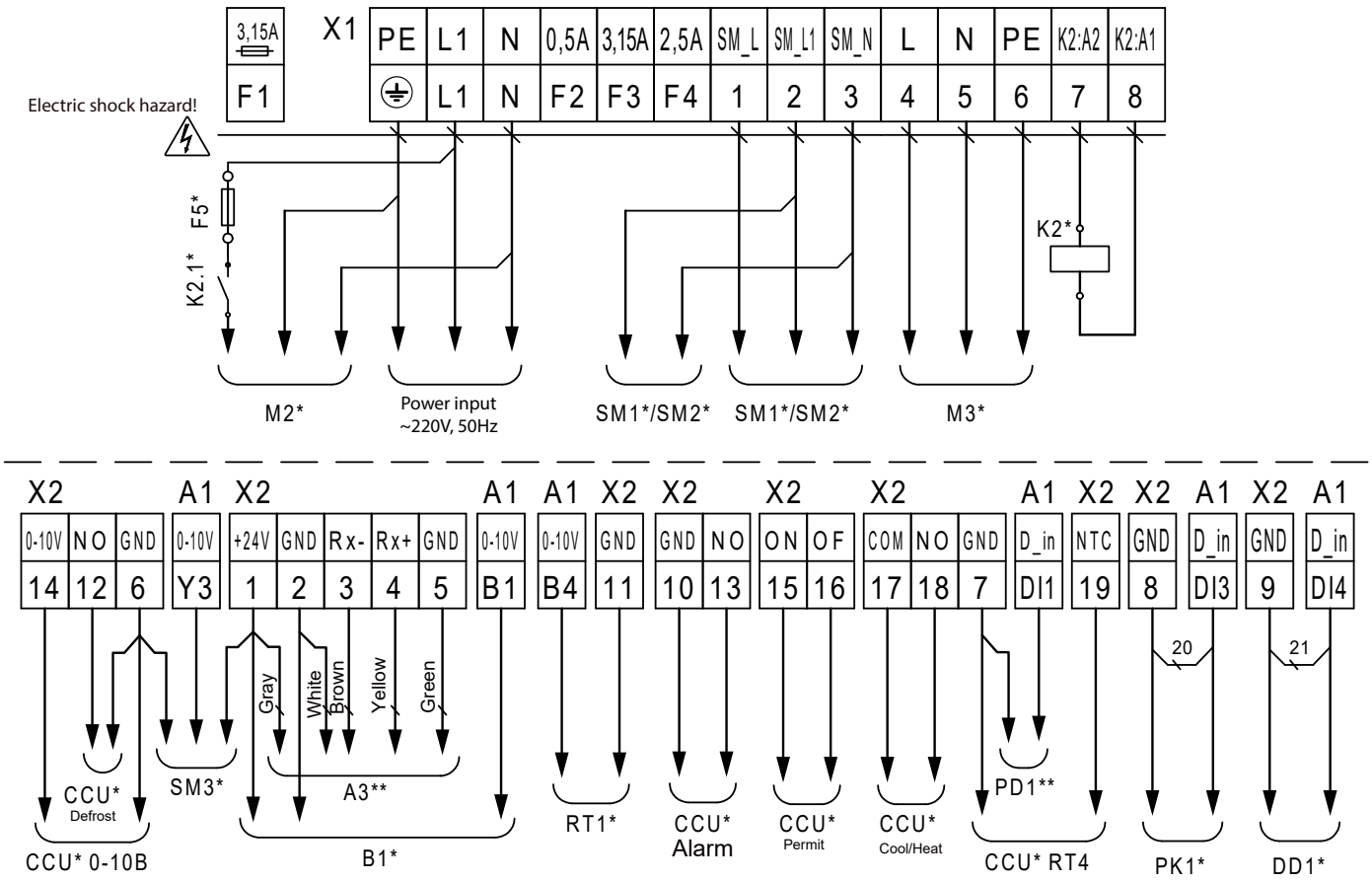
## CONNECTION TO POWER MAINS

The connection must be made using durable, insulated and heat-resistant conductors (cables, wires).
The external power input must be equipped with an automatic circuit breaker built into the stationary wiring to open the circuit in the event of overload or short-circuit.
The position of the external circuit breaker must ensure free access for quick unit power-off.
The trip current of the automatic circuit breaker must exceed the maximum current consumption of the unit (refer to the "Technical data" section or to the unit label). It is recommended to select the rated current of the circuit breaker from the standard series, following the maximum current of the connected unit.
The circuit breaker is not included in the delivery set.
The units are designed to be powered from a single-phase 230 V AC, 50 Hz network.
The conductors' cross section value is indicative. The actual wire cross section selection must be based on the type of wire, its maximum allowable heating, insulation, length and installation method.
To connect the power supply and external devices, unscrew the two screws on the cover of the control unit and remove the cover, as shown in the figure in the "Mounting and set-up" section.
Route the power supply cable and the cables for connecting the remote controller and the external temperature sensor through the cable glands to the control unit and connect them according to the wiring diagram.
**Attention! In order to ensure correct operation of the unit's control automation, the external temperature sensor must be installed in the supply air duct before the unit in the airflow path.**
The sensor is included in the delivery set.
Wiring diagrams for power supply and external devices are shown in the figures below.

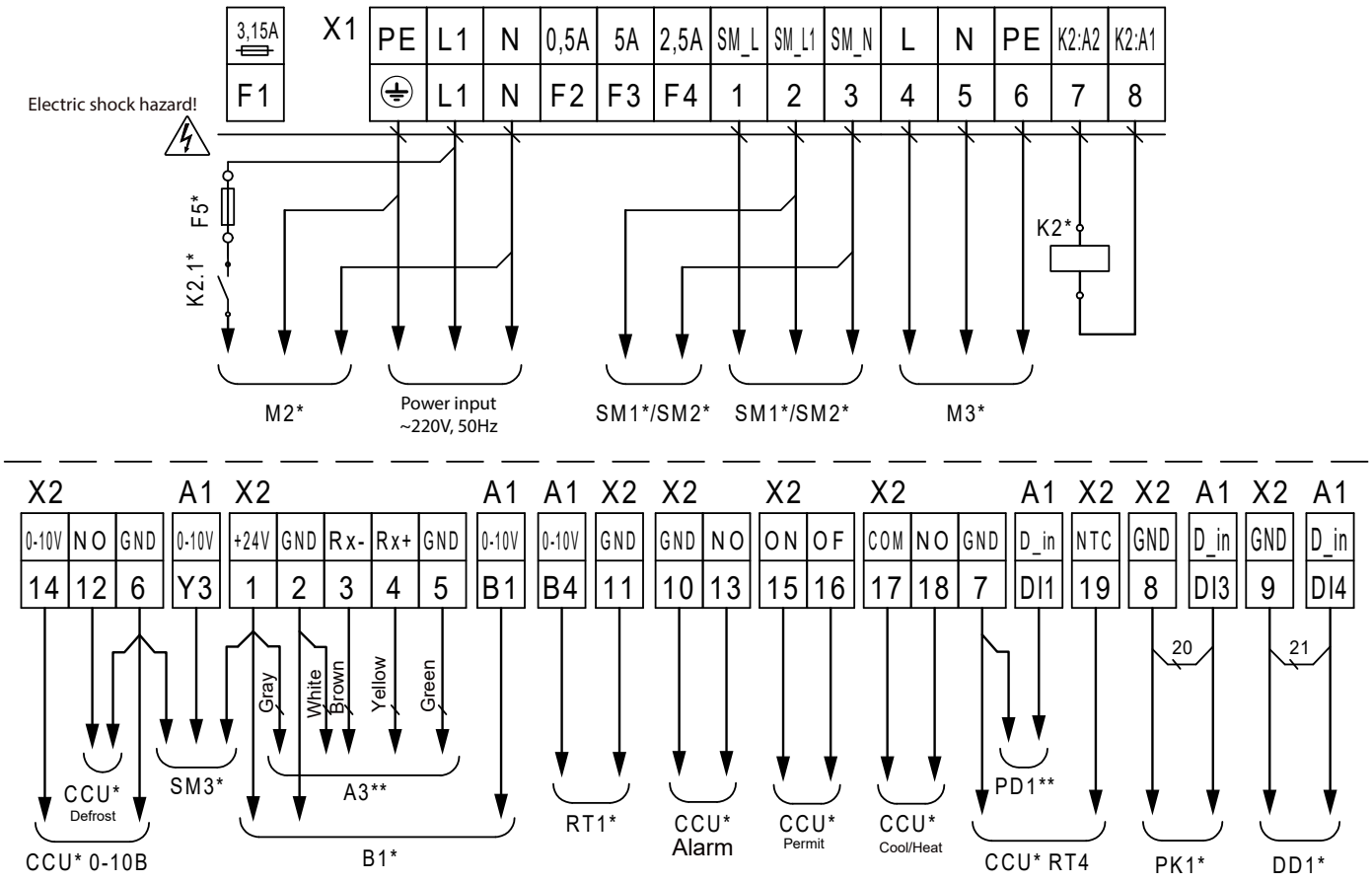
**BLAUBOX EC MW 700 S30/31/32, BLAUBOX EC MW 1000 S30/31/32, BLAUBOX EC MW 1500 S30/31/32, BLAUBOX EC MW 2000 S30/31/32**



**BLAUBOX EC MW 3000 S30/31/32**




**BLAUBOX EC MW 4000 S30/31/32**



The interpretation of the designations and the characteristics of the connection cables are given in the table.

| Designation | Name | Wire type | Type of contact | Note |
|---|---|---|---|---|
| A3** | Remote controller ThTune | 5x0.25 | | ThTune |
| B1* | $CO_2$ sensor or RH1 humidity sensor | 3x0.25 | | |
| CCU* | Cooler control | 2x0.75 | NO | |
| CCU* RT4 | Temperature sensor after heater | 2x0,25 | | |
| DD1* | Dry-run protection relay | 2x0.5 | NC | Remove the jumper 21 |
| F5* | Fuse for the exhaust motor | | | Depending on the M2 |
| K2* | Switching on the exhaust motor | 2x0.5 | NO | For M2 connection |
| M2* | Extract fan | 2x0.75 | | On/Off |
| M3* | Water pump | 2x0.5 | | |
| PK1* | Contact from fire alarm panel | 2x0.5 | NC | Remove the jumper 20 |
| PD1* | Differential pressure sensor | 2x0.25 | NO | |
| SM1* | Air damper drive 3 position | 3x0.5 | | |
| SM1* | Air damper drive 2 position | 2x0.5 | | |
| SM2* | Exhaust damper drive 3 position | 3x0.5 | | |
| SM2* | Exhaust damper drive 2 position | 2x0.5 | | |
| SM3* | Return heat medium valve | 3x0.5 | | 0-10V |
| RT1 | Outdoor temperature sensor | 2x0.25 | | up to 10m |
| *Is not included in the delivery set | | ** The unit is equipped with a Th Tune remote controller on customer's request | | |

**Note:** The pGDE remote control is connected with a 6-conductor telephone cable directly to the controller.
For detailed information on the installation, connection and use of the th-Tune and pGDE units, please refer to the user manual of the automatic control system.

**Configuration selection**

By default, the unit configuration for operating with no CCU is enabled. If the unit is used with the CCU, it is necessary to activate the appropriate configuration. To activate the selected configuration, use the pGDE control.
For units with the S30 and S31 automatic control system, this remote control must be connected only for the duration of the configuration activation.

To activate it, do the following:

- hit the **Prg** button, select **Unit cfg**
- select **Import** and specify the name of the file to be uploaded
- select **Confirm** and set it to **Y**

**The names of configuration files.**

EXPORT_2 – for BLAUBOX EC MW 700/1000/1500/2000/3000/4000 S30/31/32.
EXPORT_3 – for BLAUBOX EC MW 700/1000/1500/2000/3000/4000 S30/31/32 and CCU for cooling.
EXPORT_4 – for BLAUBOX EC MW 700/1000/1500/2000/3000/4000 S30/31/32 as preheating and reverse CCU.

To connect the CCU to the control systems S30, S31, S32, a temperature sensor designed for installation in the air duct and compatible with the specified control system must be used as RT3.

## TECHNICAL MAINTENANCE

**DISCONNECT THE UNIT FROM POWER SUPPLY BEFORE ANY MAINTENANCE OPERATIONS!**
**MAKE SURE THE UNIT IS DISCONNECTED FROM POWER MAINS BEFORE REMOVING THE PROTECTION.**

**PRIOR TO COMMENCING ANY TECHNICAL MAINTENANCE PUT UP A PROHIBITORY SIGN ON THE FAN STARTING PANEL:**
**"DO NOT SWITCH ON! MEN AT WORK!"**

**AVOID LIQUID SPILLS ON THE MOTOR! DO NOT USE AGGRESSIVE SOLVENTS AND SHARP OBJECTS FOR CLEANING!**

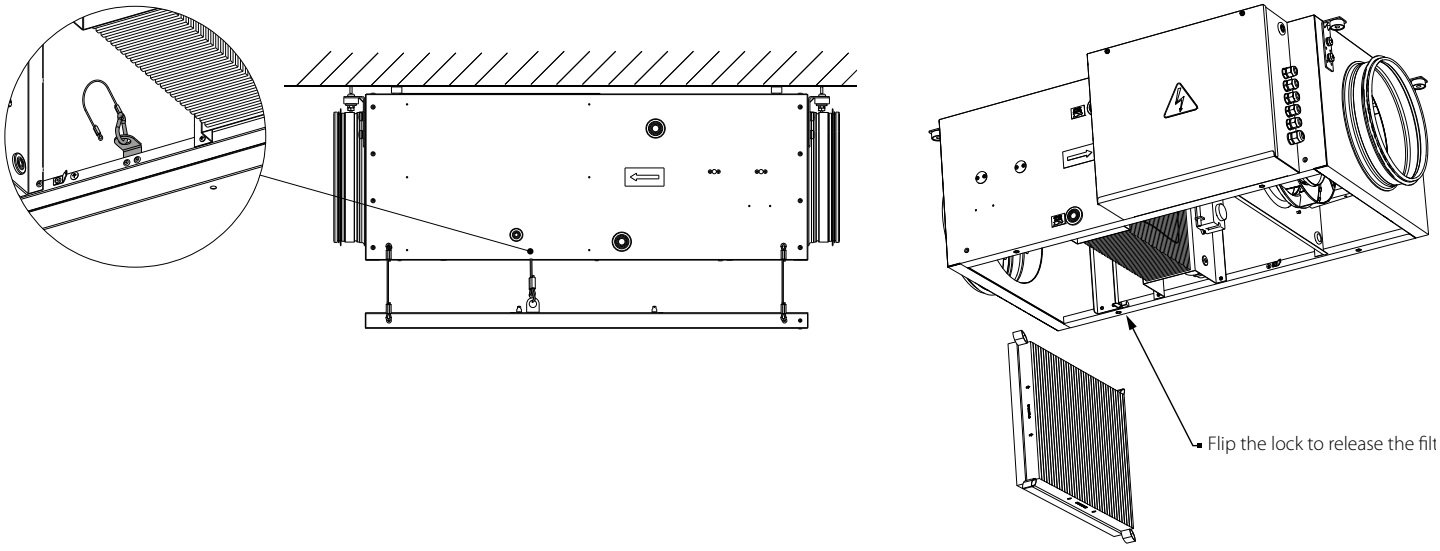
Maintenance operations of the unit are required 3-4 times per year. They include general cleaning of the unit and the following operations:

1. Filter maintenance (3-4 times per year).
Dirty filters increase air flow resistance, which leads to a decrease in the supply of supply air to the room and creates preconditions for occurrence of faults. Filters should be replaced as they become dirty, but no less than 3-4 times a year.
To change the filters, remove the unit casing cover (item 2 in the section "Unit design and operating principle").
Rotate the lock that holds the filter. Carefully remove the dirty filter.
Install new filters and cover in reverse order.
For new filters, contact the Seller.

2. Fan maintenance (once per year).
Even in case of regular maintenance of the filters, some dust may accumulate inside the fans and reduce the fan performance and supply air flow. Clean the fans with a soft brush or cloth. Do not use water, aggressive solvents, or sharp objects as they may damage the impeller.

3. Ductwork system maintenance (once in 5 years).
Even regular fulfilling of all the maintenance operations prescribed above may not completely prevent dirt accumulation in the air ducts, which reduces the system capacity. Duct maintenance means regular cleaning or replacement.

4. Control unit maintenance (as required).



## TROUBLESHOOTING

| Problem | Possible reasons | Troubleshooting |
|---|---|---|
| The unit does not start. | No power supply. | Make sure the power supply line is connected correctly, otherwise troubleshoot a connection error. |
| | Jammed motor. | Disconnect the fan from power supply. Troubleshoot the motor jamming. Restart the unit. |
| | The fan has overheated. | Disconnect the fan from power supply. Eliminate the cause of overheating. Restart the unit. |
| Automatic circuit breaker tripping after the unit start-up. | Overcurrent as a result of short circuit in the electric circuit. | Switch off the unit. Contact the Seller. |
| Noise, vibration or reduced air flow. | The fan impeller is soiled. | Clean the impellers. |
| | The fan or casing screw connection is loose. | Tighten the screw connection of the fan or the casing against stop. |
| | The ventilation system components (air ducts, diffusers, louvre shutters, grilles) are clogged or damaged. | Clean or replace the ventilation system components (air ducts, diffusers, louvre shutters, grilles). |

**Make sure that the U-trap is filled with water and the drain pipes are frost protected.**

**If troubleshooting steps have failed, contact the Seller of the product.**
**In case of faults not described in the table, contact the Seller for further information.**

## STORAGE AND TRANSPORTATION REGULATIONS

- Store the unit in the manufacturer's original packaging box in a dry closed ventilated premise with temperature range from +5 °C to + 40 °C and relative humidity up to 70 %.
- Storage environment must not contain aggressive vapors and chemical mixtures provoking corrosion, insulation, and sealing deformation.
- Use suitable hoist machinery for handling and storage operations to prevent possible damage to the unit.
- Follow the handling requirements applicable for the particular type of cargo.
- The unit can be carried in the original packaging by any mode of transport provided proper protection against precipitation and mechanical damage. The unit must be transported only in the working position.
- Avoid sharp blows, scratches, or rough handling during loading and unloading.
- Prior to the initial power-up after transportation at low temperatures, allow the unit to warm up at operating temperature for at least 3-4 hours.

## MANUFACTURER'S WARRANTY

The product is in compliance with EU norms and standards on low voltage guidelines and electromagnetic compatibility. We hereby declare that the product complies with the provisions of Electromagnetic Compatibility (EMC) Directive 2014/30/EU of the European Parliament and of the Council, Low Voltage Directive (LVD) 2014/35/EU of the European Parliament and of the Council and CE-marking Council Directive 93/68/EEC. This certificate is issued following test carried out on samples of the product referred to above.
The manufacturer hereby warrants normal operation of the unit for 24 months after the retail sale date provided the user's observance of the transportation, storage, installation, and operation regulations. Should any malfunctions occur in the course of the unit operation through the Manufacturer's fault during the guaranteed period of operation, the user is entitled to get all the faults eliminated by the manufacturer by means of warranty repair at the factory free of charge. The warranty repair includes work specific to elimination of faults in the unit operation to ensure its intended use by the user within the guaranteed period of operation. The faults are eliminated by means of replacement or repair of the unit components or a specific part of such unit component.

**The warranty repair does not include:**
- routine technical maintenance
- unit installation/dismantling
- unit setup

To benefit from warranty repair, the user must provide the unit, the user's manual with the purchase date stamp, and the payment paperwork certifying the purchase. The unit model must comply with the one stated in the user's manual. Contact the Seller for warranty service.

**The manufacturer's warranty does not apply to the following cases:**
- User's failure to submit the unit with the entire delivery package as stated in the user's manual including submission with missing component parts previously dismounted by the user.
- Mismatch of the unit model and the brand name with the information stated on the unit packaging and in the user's manual.
- User's failure to ensure timely technical maintenance of the unit.
- Damage to the unit casing and internal components caused by the user.
- Redesign or engineering changes to the unit.
- Replacement and use of any assemblies, parts and components not approved by the manufacturer.
- Unit misuse.
- Violation of the unit installation regulations by the user.
- Violation of the unit control regulations by the user.
- Unit connection to power mains with a voltage different from the one stated in the user's manual.
- Unit breakdown due to voltage surges in power mains.
- Discretionary repair of the unit by the user.
- Unit repair by any persons without the manufacturer's authorization.
- Expiration of the unit warranty period.
- Violation of the unit transportation regulations by the user.
- Violation of the unit storage regulations by the user.
- Wrongful actions against the unit committed by third parties.
- Unit breakdown due to circumstances of insuperable force (fire, flood, earthquake, war, hostilities of any kind, blockades).
- Missing seals if provided by the user's manual.
- Failure to submit the user's manual with the unit purchase date stamp.
- Missing payment paperwork certifying the unit purchase.

**FOLLOWING THE REGULATIONS STIPULATED HEREIN WILL ENSURE A LONG AND TROUBLE-FREE OPERATION OF THE UNIT**

**USER'S WARRANTY CLAIMS SHALL BE SUBJECT TO REVIEW ONLY UPON PRESENTATION OF THE UNIT, THE PAYMENT DOCUMENT AND THE USER'S MANUAL WITH THE PURCHASE DATE STAMP**

## CERTIFICATE OF ACCEPTANCE

| | |
|---|---|
| **Unit Type** | Single-block air supply unit |
| **Model** | |
| **Serial Number** | |
| **Manufacture Date** | |
| **Quality Inspector's Stamp** | |

## SELLER INFORMATION

| | |
|---|---|
| **Seller** | |
| **Address** | |
| **Phone Number** | |
| **E-mail** | |
| **Purchase Date** | |
| This is to certify acceptance of the complete unit delivery with the user's manual. The warranty terms are acknowledged and accepted. | |
| **Customer's Signature** | |

Seller's Stamp

## INSTALLATION CERTIFICATE

| | | |
|---|---|---|
| The _____ unit is installed pursuant to the requirements stated in the present user's manual. | | |
| **Company name** | | |
| **Address** | | |
| **Phone Number** | | |
| **Installation Technician's Full Name** | | |
| **Installation Date:** | **Signature:** | |
| The unit has been installed in accordance with the provisions of all the applicable local and national construction, electrical and technical codes and standards. The unit operates normally as intended by the manufacturer. | | |
| **Signature:** | | |

Installation Stamp

## WARRANTY CARD

| | |
|---|---|
| **Unit Type** | Single-block air supply unit |
| **Model** | |
| **Serial Number** | |
| **Manufacture Date** | |
| **Purchase Date** | |
| **Warranty Period** | |
| **Seller** | |

Seller's Stamp

BLAUBERG

**Manufacturer:** Ventilation Systems LLC,
Ukraine, Kyiv, 1 M. Kotsyubynskoho Street
**Address of production facilities:**
Ukraine, Kyiv Region, Fastiv District, Boyarka,
36 Sobornosti Street

www.blaubergventilatoren.de
B264EN-03